



Print : ISSN : 0019-512X | Online : ISSN : 2454-6801

THE INDIAN JOURNAL OF COMMERCE

Quarterly Publication of the Indian Commerce Association

Vol. 78

No.1

January-March, 2025

<i>Ms. Soumya Sharma, Dr. Pankaj Chaudhary, Dr. Varun Dawar</i>	The Impact of Executive Pay and Executive Power on Earnings Management in India
<i>Vallabha Kabade</i>	Occupational Stress Management for Faculty in Noida's Private Colleges
<i>Mr. Lingavel G, Dr. S. Ganapathy</i>	Benefits of Industrial Parks – A Three-dimensional Approach
<i>Ms Pooja Rani, Dr. Sourabhi Chaturvedi</i>	Role of Corporate Social Responsibility on Organisational Citizenship Behaviour moderated by the Person-Organisation Fit: The Study of the Indian Banking Sector
<i>Sowmya N, Dr. K Nirmala, P</i>	Banking in the Age of AI and Fintech: Effects on Operational Efficiency and Workforce – Evidence from Bank Employees
<i>Aishwarya S, Dr. c. vethirajan</i>	Ecological Improvement through CSR Activities by Companies and Different Types of Suppliers in Tamil Nadu
<i>Mr Akshay Naik, Prof. Anthony Rodrigues, Mr. Tejas Shirodkar</i>	Determinants of Electric Vehicle Adoption in India: an Econometric Analysis of Oil Prices, Air Quality, and Charging Infrastructure
<i>M. Sangeetha, Dr. M. Gurupandi</i>	University - Industry Linkages: A Study With Special Reference To Faculty Perspective In Tamil Nadu
<i>Dr. Brijesh H. Joshi, Sr. Prof. D Chennappa, Dr. Bhagvanbhai Madhabhaikarnavat</i>	Awareness, Perception and Adoption of E-payment System among Rural Consumers' of Gujarat State
<i>Ramesh Kumar</i>	Examining the Impact of Environmental, Social & Governance Practices on Firm Value Creation in India: A Study of Automobile Industry
<i>Dr. Nazeem. A, Dr. Biju S K</i>	Unveiling the Concerns of PDS Consumers in Kerala: The Apparent Reality
<i>Dr. Geetanjali Bhatt, Dr. Arun Kalkhundiya</i>	Role of Self-Help Groups (SHGs) in Enhancement of Women Empowerment: An Empirical Study with Special Reference to Kumaun Region of Uttarakhand
<i>Aditi Sarawagi, Dr. M. Sanjoy Singh, Prof. Shailendra Singh Bhadouria</i>	Experiencing Microfinance's Potential: Facilitating Rural Women's Employment Skills
<i>R. Vijay Raj Yadav, Chenna Upendra Madduri, Dr. M. Venkateswarlu</i>	Financial Efficiency Analysis of Selected Private Sector Banks in Nifty-50
<i>Dr. Amit Deval, Dr. Saurabh Verma, Praveen Pratap Singh</i>	Empowering MSMEs for a Viksit Bharat by 2047: A Strategic Pathway to Sustainable Economic Growth
<i>Uma Sankar, Prof (Dr.) HP Singh</i>	Cyber Risk Assessment and Measurement in UCBs – A Model Based approach
<i>Saurav Kumar</i>	Communication Collaborative Personalization a Lean Manufacturing Technique for Industry 6.0 Customers
<i>Dr. Narayan Prasad, Professor (Dr) Debabrata Mitra</i>	Factors Influencing Online Shopping E-Loyalty: An Empirical Study on Youth of North Bengal, West Bengal
<i>Dr. (MRS) Somya Nanda, Prof. Sanjeeb Kumar Jena</i>	Are Women SHG Members Financially Socialized? Scientific Mapping of Financial Socialization of Women SHG Members

The Indian Journal of Commerce

A Quarterly Refereed Journal & UGC - CARE Listed Journal

Aims and Objectives : The Indian Journal of Commerce started in 1947, is the quarterly publication of the All India Commerce, Association to disseminate knowledge and information in the area of trade, commerce, business and management practices. The Journal focusses on theoretical, applied and interdisciplinary research in commerce, business studies and management. It provides a forum for debate and deliberations of academics, Industries and practitioners.

Managing Editor

Sr. Prof. D. Chennappa
Department of Commerce
Osmania University,
Hyderabad, Telangana

Editorial Advisory Board

Prof. Ramachandra Gowda
Past President of ICA

Prof P. Purushotham Rao
Past President of ICA

Prof Sasmita Samanta
Vice Chancellor, KIIT, Bhubaneswar

Prof. Jayanta Ku Parida
Past President of ICA

Prof. Ramesh Mangal,
Past President of ICA

Editorial Consultants

Prof. R.P. Srivastava
University of Kansas
USA

Prof. Ravinder Rena
NWU, School of Business
North West University
South Africa

Prof. R.S. Pradhan
Visiting Professor
Florida State University
USA

Prof. Alojzy Z Nowak
University of Warsaw
Poland

Prof. Md. Moazzam Hussain
University of Chittagong
Bangladesh

Prof. Sailender Singh
Director, IIM, Ranchi
Jharkhand

Dr. Himanshu K. Shee
Victoria University Business
School, Victoria University
300 Flinders St, Melbourne,
Victoria, Australia 3000

Dr. Arun Chainit
Head, Department of Public
Administration & Management
Phranakhon Rajabhat
University,
Bangkok, Thailand

Dr. R.P.C.K. Jayasinghe
Head, Department of Public
Administration
Faculty of Management
Studies and Commerce,
University of Sri
Jayewardenepura,
Nugegoda, Sri Lanka

Prof. Thoman Otter
Professor of Marketing
Goethe Universitat,
Frankfurt Am Main,
Frankfurt, Germany

Prof. Parimal Vyas
Former Vice Chancellor
MSU, Baroda
Gujarat

Prof. Debabrata Mitra
Vice - Chancellor,
Dakshin Dinajpur University,
Dinajpur, West Bengal.

Prof. (Dr.) Gaikwad Arun Hari
Principal & Professor
Sangamner Nagar Palika Arts,
D.J. Malpani Commerce and
B.N. Sarada Science College,
Sangamner - Ahmed Nagar,
Maharashtra

Prof. Laxman Singh Gordsya
Dean, Faculty of Commerce,
Jai Prakash University, Chapra.

Prof. Ramesh Agadi
Former Dean and Director
Department of Management Science
Gulbarga University,
Kalaburagi, Karnataka

The Indian Journal of Commerce is published four times in a year i.e., March, June, September and December. The Indian Journal of Commerce is an open access Journal.

All manuscripts should be submitted through online www.icaindia.info only.

Correspondence : All the correspondence regarding publications should be addressed to Sr.Prof.D.Chennappa, Department of Commerce, Osmania University, Hyderabad, Telangana - 500 007.
E-mail : ica.indianjournalofcommerce@gmail.com



THE INDIAN JOURNAL OF COMMERCE

Quarterly Publication of the Indian Commerce Association

Vol. 78 **No.1** **January-March, 2025**

The Impact of Executive Pay and Executive Power on Earnings Management in India - <i>Ms. Soumya Sharma, Dr. Pankaj Chaudhary, Dr. Varun Dawar</i>	1
Occupational Stress Management for Faculty in Noida's Private Colleges - <i>Vallabha Kabade</i>	27
Benefits of Industrial Parks – A Three-dimensional Approach - <i>Mr. Lingavel G, Dr. S. Ganapathy</i>	46
Role of Corporate Social Responsibility on Organisational Citizenship Behaviour moderated by the Person-Organisation Fit: The Study of the Indian Banking Sector - <i>Ms Pooja Rani, Dr. Sourabhi Chaturvedi</i>	61
Banking in the Age of AI and Fintech: Effects on Operational Efficiency and Workforce – Evidence from Bank Employees - <i>Sowmya N, Dr. K Nirmala, P</i>	82
Ecological Improvement through CSR Activities by Companies and Different Types of Suppliers in Tamil Nadu - <i>Aishwarya S, Dr.c.vethirajan</i>	94
Determinants of Electric Vehicle Adoption In India: an Econometric Analysis of Oil Prices, Air Quality, and Charging Infrastructure - <i>Mr Akshay Naik, Prof. Anthony Rodrigues, Mr. Tejas Shirodkar</i>	117
University - Industry Linkages: A Study With Special Reference To Faculty Perspective In Tamil Nadu - <i>M. Sangeetha, Dr. M. Gurupandi</i>	130
Awareness, Perception and Adoption of E-payment System among Rural Consumers' of Gujarat State - <i>Dr. Brijesh H. Joshi, Sr. Prof. D Chennappa, Dr. Bhagvanbhai Madhabhaikarnavat</i>	148
Examining the Impact of Environmental, Social & Governance Practices on Firm Value Creation in India: A Study of Automobile Industry - <i>Ramesh Kumar</i>	166
Unveiling the Concerns of PDS Consumers in Kerala: The Apparent Reality - <i>Dr. Nazeem. A, Dr. Biju S K</i>	184
Role of Self-Help Groups (SHGs) in Enhancement of Women Empowerment: An Empirical Study with Special Reference to Kumaun Region of Uttarakhand - <i>Dr. Geetanjali Bhatt, Dr. Arun Kalkhundiya</i>	202

Experiencing Microfinance's Potential: Facilitating Rural Women's Employment Skills - <i>Aditi Sarawagi, Dr. M. Sanjoy Singh, Prof. Shailendra Singh Bhadouria</i>	217
Financial Efficiency Analysis of Selected Private Sector Banks in Nifty-50 - <i>R. Vijay Raj Yadav, Chenna Upendra Madduri, Dr. M. Venkateswarlu</i>	230
Empowering MSMEs for a Viksit Bharat by 2047: A Strategic Pathway to Sustainable Economic Growth - <i>Dr. Amit Deval , Dr. Saurabh Verma, Praveen Pratap Singh</i>	242
Cyber Risk Assessment and Measurement in UCBs – A Model Based approach - <i>Uma Sankar, Prof (Dr.) HP Singh</i>	258
Communication Collaborative Personalization a Lean Manufacturing Technique for Industry 6.0 Customers - <i>Saurav Kumar</i>	271
Factors Influencing Online Shopping E-Loyalty: An Empirical Study on Youth of North Bengal, West Bengal - <i>Dr. Narayan Prasad, Professor (Dr) Debabrata Mitra</i>	288
Are Women SHG Members Financially Socialized? Scientific Mapping of Financial Socialization of Women SHG Members - <i>Dr. (MRS) Somya Nanda, Prof. Sanjeeb Kumar Jena</i>	307

Awareness, Perception and Adoption of E-payment System among Rural Consumers' of Gujarat State

DR. BRIJESH H. JOSHI, SR. PROF. D CHENNAPPA,
DR. BHAGVANBHAI MADHABHAI KARNAVAT

ABSTRACT : The rural sector is one of the key driving forces behind India's economy, giving employment and income to millions. Furthermore, the core of rural society is agriculture. Agriculture provides a living for around 55% of the population and generates 17% of the GDP of the country. It is very important to aware the rural people regarding e-payment system. The Digital India initiative reinforced this shift by emphasizing digital infrastructure, citizen empowerment, and governance. The financial and digital payment literacy was very low in rural area and still this problems face by many remote areas. The payment by UPI and other application for e-payment are still in infancy level. So the question is how can make them aware for e-payment? And what is the adoption level of e-payment by rural people? To answer these questions, the current study is focused on awareness, perception and adoption of e-payment system among rural consumers of Gujarat state. A structured questionnaire was developed and research model was designed. A research hypothesis was tested by appropriate statistical technique like ANOVA, Path Coefficient, T-test independent and Reliability test.

Keywords: Awareness, Perception, Adoption, E-Payment, Rural Consumers'.

1.1 Introduction

Producing, advertising, and delivering products and services to rural customers—ideally inside a rural setting—is known as rural marketing. Another important component of contemporary marketing is rural marketing. It accounts for a substantial amount of our GDP. Given that more than 70% of Indians live in rural areas, the country has a sizable

Dr. Brijesh H. Joshi, Assistant Professor, D.M.Patel Arts and S.S.Patel Commerce College, (ODE), Gujarat.

Sr. Prof. D Chennappa, Professor in Commerce, Department of Commerce, Osmania University, Hyderabad.

Dr. Bhagvanbhai Madhabhai Karnavat, Associate Professor, Department of Business Management, Sankalchand Patel University, Visnagar

and diverse rural market. As a result, rural marketing is now an essential component of business marketing plans. The rural sector is one of the key driving forces behind India's economy, giving employment and income to millions. Furthermore, the core of rural society is agriculture. Agriculture provides a living for around 55% of the population and generates 17% of the GDP of the country. Issues with lower earnings, inadequate infrastructure, and restricted access to services and financing have all affected the rural market. Without a question, there are a lot of commercial prospects in Indian rural markets, and marketers would love to profit from them, especially if they have the right information and understanding of these areas.

People's actions, purchases, and ideas are typically motivated by their desire for a pleasant life, wellbeing, and aspirations in it. Consumption habits are also largely shaped by people's goals and objectives. Thus, it would be fascinating to investigate the aspirations and ambitions of consumers in the rural Indian market.

In the year 2008, RBI founded the National Payments Corporation of India (NPCI), gave India's digital payments movement a major boost. Important products including IMPS, RuPay, and most importantly UPI were introduced by the NPCI in 2016. The financial services industry's reach was further increased in 2010 with the launch of the India Stack. The Digital India initiative reinforced this shift by emphasizing digital infrastructure, citizen empowerment, and governance. The population's low level of digital and financial literacy, the fact that UPI was still in its infancy and that card payments constituted the majority of digital payments, the lack of widespread acceptance infrastructure, and the MDR associated with card payments. It established goals for banks' digital payment transactions, developed the National Electronic Toll Collection program and the Bharat Bill Payment System, increased the payment infrastructure, created new digital payment methods, ran nationwide awareness campaigns, enhanced computer and digital literacy through PMGDISHA, and put in place incentive plans for banks and FinTechs.

2.1 Review of Literature

Rajanna, Dr. K.A. (2018) Based on his research, it appears that Indian customers are in favor of the government's efforts to digitize and go cashless, believing that these developments will primarily aid in the battle against corruption in society. He discovered that the main obstacles to making India a cashless economy are cybercrime and unauthorized online access to websites. Therefore, in order to safeguard citizens from online fraud, it is imperative to fortify internet security.

Shakir Ali, S. MD.; MD Wasim (2017) their analysis indicates that Indian economy depends heavily on a few key elements to continue developing and growing, including

corporate governance, more transparency, and restrictions on the use of parallel currency. In their paper, they addressed the many obstacles that rural areas experience when attempting to implement digital payments, as well as the opportunities to overcome these obstacles.

E. Gopi and Dr. R. Gokilavani (2018) conducted a study indicating that merging traditional payment systems with a cashless economy necessitates some reforms and significant effort, particularly for low-income individuals who primarily rely on cash due to its perceived ease and convenience. Their research suggests that transitioning India to a cashless economy will require considerable effort, as a large portion of the population is not accustomed to or knowledgeable about online banking and payment methods. The introduction of affordable smartphones is expected to transform the banking sector in the future.

In her 2016 research, Priti Rai examined the effects of the demonetization policy implemented in India, which involved the withdrawal of 500 and 1000 Rs. notes. The study revealed that this policy significantly affected the trading activities of MSMEs, particularly in terms of how customers made payments. It was observed that customers began to adopt alternative payment methods, with mobile wallet companies emerging as the primary beneficiaries, as they provided convenient solutions for payments through smartphones.

In her 2016 study, Priti Rai found that before the demonetization initiative, cash was the most commonly used payment method. However, after demonetization, net banking became the preferred choice. This aligns with findings from the Reserve Bank of India, which reported a 175% increase in mobile banking transactions and a 369% rise in the total amount transacted over the past year. As a result, consumers shifted away from cash payments and favored credit and debit cards. Additionally, there was a notable preference for E-wallet mobile apps post-demonetization, while cheque payments saw a decline in popularity. Overall, the demonetization initiative was considered a significant and positive change.

In their 2014 paper titled “Analysis of Security Issues in Electronic Payment Systems,” Prince will Aigbe and Jackson Akpojarro examined various types and methods of payment process authentication. They found that electronic payment systems employing two or more authentication factors are more secure, which helps to minimize fraud and boosts users’ confidence in utilizing digital payment systems.

Waqas et al. (2016) conducted a comprehensive survey on security in next-generation mobile payment systems. The paper outlines the security measures implemented in mobile payment systems, which are increasingly reliant on digital transactions via mobile

devices. It discusses various components of these systems, their limitations, and the security mechanisms involved in payment processes. The authors emphasize the necessity of encryption and authentication for every transaction, as the future of mobile payment systems will hinge on these features.

In his 2020 paper, Suliman A Salem Ben Ghrbeia examines customer perceptions of digital payments and identifies several obstacles to security in these systems. These include an inadequate software, insufficient support from top management, a significant shortage of technical skills, and limited government assistance. The paper explores the connection between security and the advantages of digital payment systems, concluding that customers remain sceptical about the safety of online transactions, fearing potential hacking or phishing.

3.1 Research Methodology

Research design is the map which provides necessary direction and guidelines. It explains about the overall structure, plan and data analysis process (Leddy & Ormrod). It is very important to apply and study in the research. The whole research design is categorized into their parts.

Descriptive research design is used to validate the hypothesis generated from the problems and objectives of the research. A structured questionnaire was developed from the literature and the descriptive research. The respondents were contacted at their residential area or work area to fill up the questionnaire.

3.2 Objectives of the Study

The present research has been defined with the following objectives.

Primary Objective:

The main purpose of the present study is to know awareness, perception and adoption of e-payments by people of rural area in Gujarat.

Other Objectives:

The other objectives of the present study are as follows:

1. To know the level of awareness of E-payments system among people in rural area of Gujarat.
2. To study the sources of information about e-payment.
3. To understand the perception of people in rural area of Gujarat about e-payments system.

4. To explore the level of adoption of e-paymentsystem by people in rural area of Gujarat.
5. To assess risks and challenges faced by rural people while using different modes of e-payment.

3.3 Hypothesis of the Study

H1: The responsiveness level of male (rural area) regarding e-paymentsystem is greater than female respondents.

H2: There is a significant relationship between advantages and rural consumers' perception toward e-payment.

H3: There is a significant relationship between trust and rural consumers' perception toward e-payment.

H4: There is a significant relationship between user friendly and rural consumers' perception toward e-payment.

H5: Functioning expectancy positively influences adoption process to use e-paymentsystems.

H6: Probability of efforts positively influences adoption process to use e-paymentsystems.

H7: Societal group impact positively creates impact in adoption process to use e-paymentsystems.

H8: Provide suitable conditions positively create impact in adoption process to use e-paymentsystems.

H9: A user limitationsabsolutely create impact in adoption process to use e-paymentsystems.

H10: A value problem positively creates impact in adoption process to use e-paymentsystems.

H11: A risk problems positively create impact in adoption process to use e-paymentsystems.

H12: A traditional problemabsolutely create impact in adoption process to use e-paymentsystems.

Figure: 1:Frameworkof Research Work

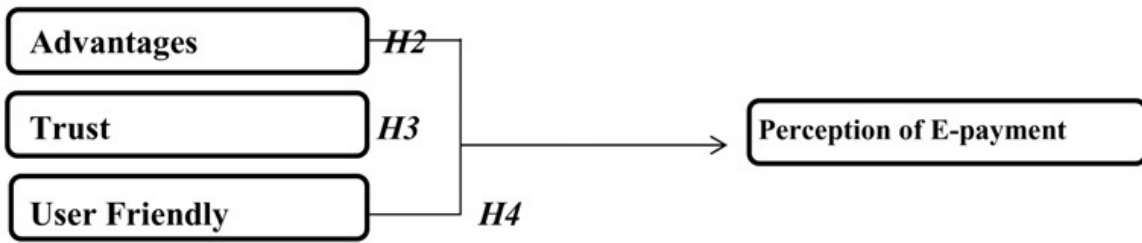
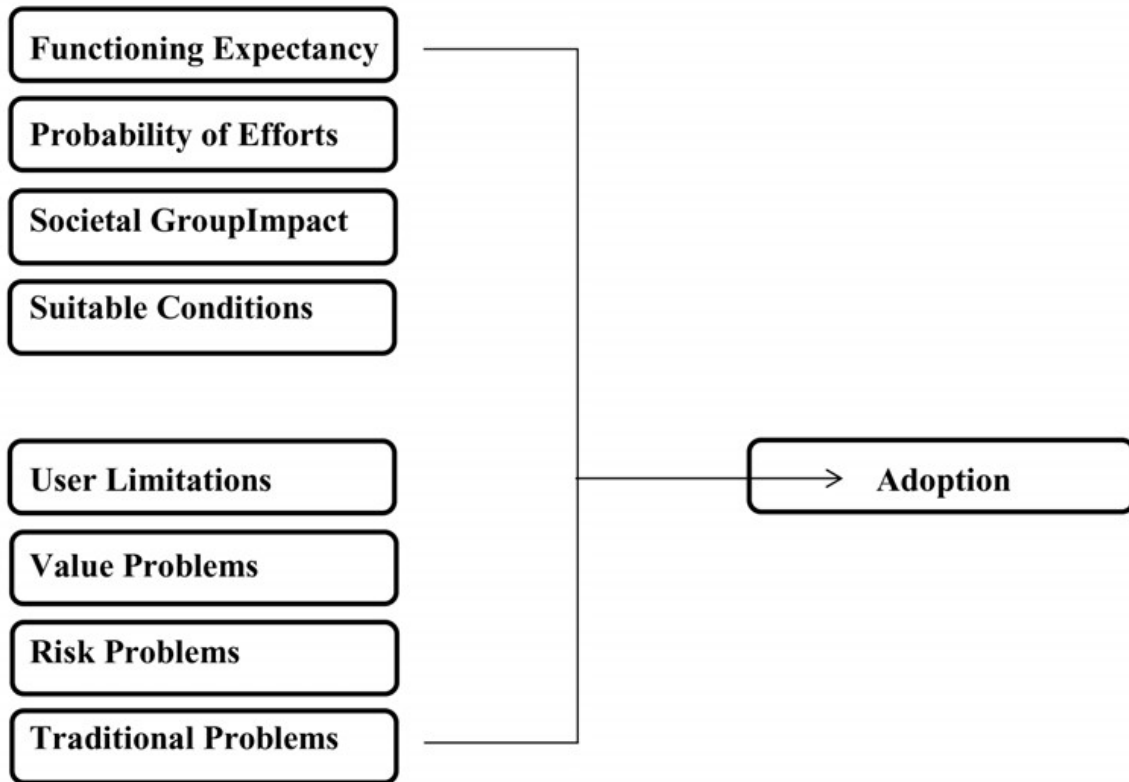


Figure: 2: Research Framework



3.4 Universe and Sampling Plan

3.4.1TheUniverse

Theuniverseoftheproposedresearchstudywasalltherural peopleoftheGujarat.

3.4.2 Sample size

The samples were collected from major region of Gujarat. Total 500 samples were collected from major region of Gujarat. The samples were collected from North Gujarat, Central Gujarat, South Gujarat and Saurashtra.

Formula to determine the sample size of population:

$$\text{Sample size, } n = N * \frac{\frac{Z^2 * p * (1 - p)}{e^2}}{[N - 1 + \frac{Z^2 * p * (1 - p)}{e^2}]}$$

Where,

N = Size of Population,

Z = The normal distribution critical value at the required confidence level,

p = Proportion of sample,

e = Error Margin

Source: Tomas P Rayan (2013)

3.4.3 Sampling plan

In this research, convenient sampling method was applied for data collection. The data and information were collected from variety group of respondents. This method was used among major division or districts of Gujarat state.

Table: 3.1 sampling plan

Sr. No.	Name of Major Divisions	Number of Respondent
1	North Gujarat	125
2	Central Gujarat	125
3	South Gujarat	125
4	Saurashtra	125
Total		500

3.4.4 Period of data collection

The primary data were collected from February 2024 to March 2024. It took one month time period in collection of a data.

3.4.5 Sources of Data

In the present study, different types of data were collected from the respondents.

Primary Data

In this study the primary data were collected from the large group of respondents. For primary data, non-probability sampling method is used. In the present study, a structured questionnaire was used for data collection. A questionnaire was designed in English and Gujarati both.

Secondary Data

In this paper, different types of secondary sources were used such as seminar reports, working research papers, newspaper, library of university and college, books, websites and electronic resources.

3.5 Techniques of Data Collection

The data were collected through structured questionnaire and interview with rural people of different districts of Gujarat state.

3.5.1 Questionnaire:

A multiple-choice questionnaire was designed to collect comprehensive information on e-paymentsystem among rural people. The questionnaire asked about awareness, perceptions and adoption of e-paymentsystems. A questionnaire was designed into three sections with section A, B, C & D.

The multiple-choice questions were divided into three parts; namely

A: General information of working individuals

B: Awareness about e-paymentsystem

C: Perception towards e-payment

D: Adoption of e-paymentsystem by rural people.

3.5.2 Conduct Interviews:

Personal interviews were done, as well as expert recommendations on e-payment were received. This might be a very useful resource for understanding people's concerns in Gujarat and giving solutions to solve them.

3.6 Analysis and Interpretation of Data

The primary data were collected through multiple choice questions and likert scale questions. Analysis was done with the help of SPSS software and tables were prepared with this software. Hypothesis of the proposed research study was tested by appropriate statistical technique like ANOVA, Path Coefficient, T-test independent and Reliability test. The interpretation was done in MS Word. A detailed interpretation of each question was written for this research work.

3.7 Limitations of the Study

Limitations of the study are as follow.

- There was a time constraints in research.
- The study was conducted in rural area so there was a language barrier in data collection.

- Many respondents from rural area were not interested in expressing their own opinions and views, and very few respondents express common opinions on e-paymentsystem.
- The researchers were used primary data in the study, so researcher has to depend upon respondent's preferences. Respondent's bias was affected the result.

4.1 Data Analysis and Interpretation

4.1.1 Levene's Test for Equality of Variances

Table: (4.1) Group Statistics

	Gender	N	Mean	Std.Deviation	Std.ErrorMean
Overall Customer Awareness	Male	300	4.3038	.43428	.02145
	Female	200	4.3567	.37855	.02087

(Source:Primary Data)

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Overall Customer Awareness	Equal variances assumed	1.501	.211	-1.642	632	.072	-.05333	.0330
	Equal variances not assumed			-1.759	726.330	.067	-.04513	.03214

(Source:Primary Data)

Result of Gender Status

The p -value of Levene's test is printed as ".221" (but should be read as $p > .221$ — i.e., p very high), so in this case the null hypothesis of Levene's test is accepted and finally concluded that the variance in the overall customer awareness of male is significantly not greater than female respondents.

T-test for Equality of Means

The above table shows the differences of mean with “t” value. The above t value disclosed that the female are more aware then male group. It means, overall customer awareness of female group is higher than male group.

Table: 4.3Table of Construct Validity

Second-orderconstruct	First-orderconstruct	Item	Outerloading	AVE	CR	Cronbach'salpa
	FE	FE1	0.683	0.662	0.786	0.732
		FE2	0.864			
		FE3	0.783			
		FE4	0.802			
	PE	PE1	0.834	0.686	0.797	0.737
		PE2	0.838			
		PE3	0.819			
		PE4	0.812			
BI	SGI	SGI1	0.821	0.610	0.811	0.864
		SGI2	0.770			
		SGI3	0.768			
		SGI4	0.916			
	SC	SC1	0.836	0.674	0.832	0.784
		SC2	0.814			
		SC3	0.742			
		SC4	0.912			
	UL	UL1	0.823	0.755	0.852	0.838
		UL2	0.821			
		UL3	0.832			
		UL4	0.815			
	VP	VP1	0.840	0.740	0.859	0.751
		VP2	0.819			
IR		VP3	0.930			
		VP4	0.879			
		VP5	0.930			
		VP6	0.890			
	RP	RP1	0.768	0.759	0.906	0.869
		RP2	0.670			
		RP3	0.716			
		RP4	0.670			
		RP5	0.637			
	TP	TP1	0.835	0.620	780	0.715
		TP2	0.821			
		TP3	0.832			

Path Coefficient Table: (4.4 Path Coefficients)

Hypothesis	Path (Usages E-Payment System)	Pathcoef ficient	Standard error	t/statistics	Decision
H1	FE-BI to utilize electronic mode	0.338	0.087	3.421***	Accepted
H2	PE-BI to utilize electronic mode	0.221	0.066	2.552***	Accepted
H3	SGI-BI to utilize electronic mode	0.281	0.064	4.011***	Accepted
H4	SC-BI to utilize electronic mode	0.202	0.055	3.915***	Accepted
H5	UL-IR to utilize electronic mode	0.303	0.067	0.213***	Accepted
H6	VP-IR to utilize electronic mode	0.401	0.065	3.123***	Accepted
H7	RP-IR to utilize electronic mode	2.301	0.062	3.333***	Accepted
H8	TP-IR to utilize electronic mode	2.204	0.077	4.345***	Accepted

(Source: primary data)

Hypothesis 5 is examined with the use of path coefficient and t-statistics. The above results disclosed that path coefficient PE (path coefficient=0.338, t-statistics=3.421) significantly assume BI to use e-payment system. So the H5 is accepted.

Result: Functioning expectancy positively influences adoption process to use e-payment systems.

Hypothesis 6 is examined with the use of path coefficient and t-statistics. It examined the probability of efforts. The above results disclosed that path coefficient PE (path coefficient=0.221, t-statistics=2.552) significantly assume BI to use e-payment system. So the H6 is accepted.

Result: Probability of efforts positively influences adoption process to use e-payment systems.

Hypothesis 7 is examined with the use of path coefficient and t-statistics. It examined the societal group impact. The above results disclosed that path coefficient SGI (path coefficient=0.281, t-statistics=4.011) significantly assume BI to use e-payment system. So the H7 is accepted.

Result: Societal group impact positively influences in adoption process to use e-payment systems.

Hypothesis 8 is examined with the use of path coefficient and t-statistics. It examined to provide suitable conditions. The above results disclosed that path coefficient SC

(path coefficient=0.202, t-statistics=3.915) significantly assume BI to use e-paymentsystem. So the H8 is accepted.

Result: Provide suitable conditions positively create impact in adoption process to use e-paymentsystems.

Hypothesis 9 is examined with the use of path coefficient and t-statistics. It examined the user limitation. The above results disclosed that path coefficient UL (path coefficient=0.303, t-statistics=0.213) significantly assume IR to use e-paymentsystem. So the H9 is accepted.

Result: User limitations positively create impact in adoption process to use e-paymentsystems.

Hypothesis 10 is examined with the use of path coefficient and t-statistics. It examined the process of value problem. The above results disclosed that path coefficient VP (path coefficient=0.401, t-statistics=2.123) significantly assume IR to use e-paymentsystem. So the H10 is accepted.

Result: Process of value problem positively create impact in adoption process to use e-paymentsystems.

Hypothesis 11 is examined with the use of path coefficient and t-statistics. It examined the problems in risk. The above results disclosed that path coefficient RP (path coefficient=2.302, t-statistics=3.323) significantly assume IR to use e-paymentsystem. So the H11 is accepted.

Result: Problems in risk positively create impact in adoption process to use e-paymentsystems.

Hypothesis 12 is examined with the use of path coefficient and t-statistics. It examined the traditional problems. The above results disclosed that path coefficient TP (path coefficient=2.203, t-statistics=4.335) significantly assume IR to use e-paymentsystem. So the H12 is accepted.

Result: Traditional problems positively create impact in adoption process to use e-paymentsystems.

Validity and Reliability

Table: (4.5: Validity and Reliability)

	Measures						
	<i>Independent variables</i>	Items	Factor Loading	KMO	Variance	AVE	CR
	Advantage	5	0.672-0.821	0.633	4.921	20.724	0.572
	Trust	4	0.675-0.723		2.263	13.207	0.610
	User friendly	2	0.772-0.789		1.330	7.834	0.669
	Security	2	0.759-0.769		1.212	6.777	0.640
Table II.	<i>Dependent variable</i>						
Validity and reliability rates for the independent and dependent variables	Consumers' perception toward electronic payment mode.	4	0.503-0.764	0.549	2.129	46.249	0.457
						0.750	0.639

Table: (4.6: Mean and Standard Deviation)

No.	Item	Mean	SD
<i>Advantage</i>			
1	This process save my time and money	3.23	0.560
2	E-payment is suitable for me	3.49	0.481
3	It is helpful in handling transaction process	3.39	0.552
4	E-payment is speedier than traditional methods	3.35	0.532
Average		3.41	0.487
<i>Trust</i>			
1	I have trust on E-payment system for transaction	2.85	0.417
2	I have trust on E-payment that it will not create fraud	2.64	0.625
3	Secrete information and data can easily apply	3.12	0.401
4	The risk level is very low	2.47	0.556
Average		2.73	0.456
<i>User friendly</i>			
1	It is very easy to use and any person can easily understand	3.01	0.421
2	It is easy to operate and learn	3.12	0.385
Average		3.02	0.413

Validity and reliability analysis

The questionnaire's construct validity was also assessed. The Barlett sphericity test is very significant, and the independent variables have a Kaiser-Meyer-Olkin (KMO) sample adequacy of 0.60. The data are therefore appropriate for factor analysis.

The Cronbach's α scores for all variables are greater than 0.60, indicating that the constructs have relatively good internal consistency (Downing, 2004; Hair et al., 1998).

Results:

With the R^2 -value showing more than fifty percent of variances, advantages, trust and user friendly, are connected with consumers' perception towards e-payment. As such, $H2$, $H3$, and $H4$ are accepted.

5.1 Suggestions

Government Initiatives:

- **Incentives:** Government should offer cash back, discounts, or rewards for using e-payments. These initiatives will attract more customers towards e-payments system in India.
- **Mandates:** Gradually phase out cash payments for certain transactions or in specific regions.
- **Infrastructure:** The most current TRAI data indicates that whereas internet penetration in urban India was 99 percent, it was only about 33 percent in rural India. The main causes of this discrepancy are twofold: a deficiency in awareness and infrastructure. To narrow the gap, the Indian government launched the "Digital India" initiative. They should take interest to make this process more flexible.
- **Education:** Conduct awareness campaigns to educate people about the advantage of e-payments. The government should conduct a number of awareness programs for e-payments, including:
 1. **DIGIDHAN Mission:** This mission included initiatives like DigiVAARTA, which used SMS communication to educate people about e-payments.
 2. **E-payment Suraksha Campaign:** This campaign includes awareness videos and brochures to educate people about best practices for using different payment channels.
 3. **RBI's E-payments Awareness Week:** This week-long event has been held annually since 2021.

4. **RBI Says:** This multimedia campaign creates awareness about E-payment initiatives.
5. **E-payment Utsav:** This event celebrates the rise of e-payments in India.

Other strategies

- ❖ Other strategies to promote e-payments include:
- ❖ Door-to-door campaigns
- ❖ Market area campaigns
- ❖ Workshops and competitions in schools and colleges
- ❖ Incentive schemes
- ❖ Free PoS machines for merchants

Financial Institutions:

- **User-Friendly Apps:** Develop spontaneous and secure mobile apps for easy transactions.
- **Customer Support:** They should facilitate help center for customers.
- **Financial Literacy:** Educate customers about e-payment security and best practices.
- **Partnerships:** Collaborate with merchants and businesses to expand acceptance of e-payments.

Merchants and Businesses:

- **Acceptance:** Ensure all businesses, especially small ones, accept e-payments.
- **Training:** Provide training to staff on handling e-payment transactions.
- **Promotions:** Offer discounts or promotions for customers who pay digitally.
- **Security:** To ensure that data of customers are safe.

Technology Providers:

- **Innovation:** Develop innovative payment solutions tailored to Indian needs.
- **Interoperability:** Ensure seamless interoperability between different payment systems.
- **Security:** Prioritize cyber security to build trust among users.
- **Accessibility:** Make e-payment solutions accessible to people with disabilities.

Social and Cultural Factors:

- **Trust:** Build trust in e-paymentsystems by addressing security concerns.
- **Convenience:** Highlight the convenience and time-saving advantage of e-payments.
- **Social Proof:** Encourage influencers and celebrities to promote e-payments.
- **Cultural Sensitivity:** Consider cultural factors and preferences when designing payment solutions.

6.1 Conclusion and Implications

This study investigates the elements that effect to Indian customers' perceptions of electronic mode of payment. The findings reveal that e-payments is frequently operate, indicating the expansion of such services in India. The regression findings demonstrate that trust, user friendlyare strongly connected with customers' attitudes regarding e-payments. In the above study, performance expectancy, probability of efforts, social influence, suitable conditions, user limitations, value problems, problems in risk, and traditional problems are positively influence in adoption process of e-payment. They must minimize the level of risk in e-payment process. The government should continuously arrange the program of e-payment process in rural areas so people can be aware about it.

Theoretical implications

The current study focused on adoption process of e-payment system by rural people in Gujarat state. Earlier many researches have been published on e-payment but only few studied had focused on awareness, perception and adoption of e-payment process.

Practical implications

The present study is focused on e-payment system and usages by rural people. The mentalities of rural people are not so broadminded. Even they are not well educated and aware regarding e-payment process. The adoption process of e-payment system is not so easy with rural people of this country. Indian government and its policymaker should remove the difficulties of e-payment system and make it so convenient and user friendly. The output of the present study will useful to design more appropriate policies for e-payment system and will useful to government, businesses and other people of this country.

Future Research

This study will helpful not only to academicians but also to researchers and corporate people. The present study is focused on selected rural areas of selected region of

Gujarat state but the same study can be apply to do comparative study of two different states.

References

Aarts, H. and Dijksterhuis, A. (2000). Habits as knowledge structures: automaticity in goal directed behavior. *Journal of Personality and Social Psychology*, Vol. 78 No. 1, pp. 53-63.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

Al-Ajam, A. and Nor, K.M. (2013). Adoption of internet banking by Yemeni consumers: an empirical investigation. *Australian Journal of Basic and Applied Sciences*, Vol. 7 No. 2, pp. 182-189.

Babu, G. C. (2018). Awareness and Preference towards E-payment Mechanisms- A Study. *International Research Journal of Management Science & Technology*, pp. 352-361.

Brown, I., Cajee, Z., Davies, D., & Stroebel, S. (2003). Cell phone banking: predictors of adoption in South Africa- an exploratory study. *International Journal of Information Management*, 23(5), 381-394.

Bürk, H., & Pfitzmann, A. (1989). E-payments systems enabling security and unobservability. *Computers & Security*, 8(5), 399-416.

Calisir, F., & Gumussoy, C. A. (2008). Internet banking versus other banking channels: Young consumers' view. *International Journal of Information Management*, 28(3), 215-221.

Chun, K. L. (2015, December 10). Adoption of Smart Card-Based E-payment System for Retailing in Hong Kong Using an Extended Technology Acceptance Model, *E-Services Adoption: Processes by Firms in Developing Nations*, 23B, 255-466.

Dwight, V. D., Merl, H., & Juita-Elena (WIE), Y. (2013, June). Electronic Payments for State Taxes and Fees: Acceptance, Utilization, and Challenges. *Public Performance & Management Review*, 36(4), 616-636.

Eastin, M.J. (2002). Diffusion of e-commerce: an analysis of the adoption of four e-commerce activities. *Telematics and Informatics*. Vol. 19 No. 3, pp. 251-267.

Gao, L., & Waechter, K. A. (2017). Examining the Role of Initial Trust in User Adoption of Mobile Payment Services: An Empirical Investigation, *Information Systems Frontiers*. 19(3), 525-548.

Gefen, D., & Straub, D. W. (1997). Gender differences in the perception and use of e-mail: An extension to the technology acceptance model. *MIS quarterly*. 389-400.

Haryanti, T., & Subriadi, A. P. (2020). Factors and Theories for E-Commerce Adoption: A Literature Review. *International Journal of Electronic Commerce Studies*. 11(2), 87-106.

Hyttinen, A., & Takalo, T. (2009). Consumer awareness and the use of payment media: Evidence from young Finnish consumers. *Review of Network Economics*, 8(2), 164-188.

Jose, S., & Prakasam, K. C. (2019). Consumers' and Retailers' Kinds of Awareness of Cashless Payment System. *Journal of Emerging Technologies and Innovative Research*. pp. 503-511.

Kalyani, P. (2016). An Empirical Study about the Awareness of Paperless E-Currency Transaction like E-Wallet Using ICT in the Youth of India. *Journal of Management Engineering and Information Technology (JMEIT)*. Volume-3, Issue-3, Jun. 2016, ISSN: 2394 - 8124, pp 18-41.

Lee, E. J., & Lee, J. (2000). Haven't adopted electronic financial services yet? The acceptance and diffusion of electronic banking technologies. *Journal of financial Counselling and Planning*. Vol 11 (1), 49-60.

M. Niranjana Murthy, DR. Dharmendra Chahar. (2013). The study of E-Commerce Security Issues and Solutions, *International Journal of Advanced Research in Computer and Communication Engineering*, Vol.2 issue 7, pp.1-12.

Ming-Yen Teoh, W., Choy Chong, S., Lin, B., & Wei Chua, J. (2013). Factors affecting consumers' perception of electronic payment: an empirical analysis. *Internet Research*. 23(4), 465-485.

Muthaiyah, S., Ernest, J. A. J., & Wai, C. K. (2011). Review of E-Commerce Issues: Consumers Perception on Security and Privacy. *International Business & Economics Research Journal (IBER)*, 3(9), 69-78.

Books:

G.C.Beri (2013) *Marketing Research*: McGraw Hill Publications.

Conference Proceeding Papers:

Dahlberg, T. and Oorni, A. (2007). Understanding changes in consumer payment habits - do mobile payments and electronic invoices attract consumers?, 40th Annual Hawaii International Conference on System Sciences (HICSS), IEEE, p. 50.

Fatimah, M.A., Kusairi, M.N. and Mohd, F.A. (2000), "E-commerce adoption in Malaysia : problems and barriers from the firms' perspective", *Proceedings of International Conference on Electronic Commerce*, November 21-23, Kuala Lumpur.